

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-00900027-2008 (Part 2 of 2)**

Application Received: **May 08, 2007**

Plant Identification Number: **03-054-009-00027**

Permittee: **Ball Metal Food Container Corporation**

Mailing Address: **3010 Birch Drive, Weirton, West Virginia 26062**

Physical Location:	Weirton, Brooke County, West Virginia
UTM Coordinates:	531.90 km Easting • 4,470.80 km Northing • Zone 17
Directions:	From downtown Weirton, south on Route 2 to Freedom Way. Right on Freedom Way to Birch Drive. Right on Birch Drive approx. 1 mile. Facility is on the right side of road in Mittal Steel complex in Half Moon Park.

Facility Description

The plant receives coils of tin-plated steel which it cuts into sheets and coats with lithographic inks and/or protective varnishes. The sheets are cured in ovens and shipped off site to be made into food, aerosol or special containers or pressed into container ends. The plant has 13 permitted coating lines: six (6) standard sheet coating lines located inside a permanent total enclosure (EPA Method 204 PTE) and controlled by a thermal oxidizer, five (5) lithography lines (lines with multi-color printers followed by coaters) in which the coaters are controlled by exhaust hoods which are routed, along with their oven emission into the oxidizer, one (1) LTG coater located in a permanent total enclosure (PTE) and controlled by its own oxidizer, and one (1) Planeta printer, which is uncontrolled but uses only ultraviolet coatings and has little emissions relative to the other emission units at the facility. The facility is characterized by SIC and NAICS codes 3411 and 332431, respectively.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions ⁽³⁾	2005 Actual Emissions ⁽²⁾
Carbon Monoxide (CO)	13.4	0.47
Nitrogen Oxides (NO _x)	16.0	8.57
Particulate Matter (PM ₁₀)	12.5	Not available from CES
Total Particulate Matter (TSP)	12.5	0.65
Sulfur Dioxide (SO ₂)	0.1	0.05
Volatile Organic Compounds (VOC)	942.5	149.89 ⁽¹⁾

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions ^{(3) (4)}	2005 Actual Emissions ⁽²⁾
Xylene		9.66
Ethyl Benzene		3.65
1, 2 – Ethanediol		0.27
Glycol Ethers		1.47
Cumene (isopropyl benzene)		0.49
Methyl Isobutyl Ketone		9.20
Isophorone		2.51
Formaldehyde		0.06
Toluene		0.42
Naphthalene		1.53
Total HAPs	242.0	29.3

- (1) *The actual VOC emissions contain 29.3 tons which are also HAPs.*
- (2) *The 2005 Actual Emissions are reproduced from the permittee's 2006 Certified Emissions Statement Invoice, and represent the emissions from January 1, 2005 through December 31, 2005.*
- (3) *All PTEs are for Part 2 of the Ball Metal Food Container Corporation facility (Plant ID 009-00027) alone.*
- (4) *The potential emissions for each speciated HAP is not available due to variability of materials used at the facility.*

Title V Program Applicability Basis

This facility has the potential to emit 942.5 tons per year of VOC, and 242.0 tons per year aggregate HAPs. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, and over 25 tons per year of aggregate HAPs, Ball Metal Food Container Corporation (Part 2 of 2), is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6	Prevention and Control of Air Pollution from Combustion of Refuse
	45CSR7	Prevention and Control of Particulate Matter
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits for Construction
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission standards for HAPs for source categories pursuant to 40 C.F.R. Part 63
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63, Subpart KKKK	Surface Coating of Metal Cans
	40 C.F.R. Part 64	Compliance Assurance Monitoring
State Only:	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2295C	April 2, 2008	
R30-00900015-2002	November 4, 2002	PD97-138

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under

the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

1. Sheet Coaters and Ovens, Lines C-1 through C-6 (Emission Unit IDs 001-01 through 001-12), Emissions Capture System, and Regenerative Thermal Oxidizers (Control Device ID 0001)

a. R13-2295C Conditions

Condition 4.1.12. requires control device 0001 to reduce emissions of HAPs by 95%, which is based upon applicable MACT requirement discussed below.

Condition 4.1.13. specifies the minimum operating temperature 1,450°F (815°C). This requirement is set forth in permit condition 4.1.1.

b. 45CSR6 – To Prevent and Control Air Pollution from Combustion of Refuse

The emissions of VOC and HAP from the coaters and ovens are destroyed by the regenerative thermal oxidizers identified as Control Device ID 0001, which subsequently emits particulate matter. The RTO is actually a 2-canister regenerative thermal oxidizer with a common stack. There are two RTOs, but they act as one control device, venting to one stack (*i.e.*, emission point ID 1E). Active permit R30-00900027-2002, condition E.1.a., specified a PM emission limit of 1.4 lb per hour per RTO. The underlying requirement for the permit condition is 45CSR§6-4.1. Condition E.1.b. established the monitoring required to demonstrate compliance with the 1.4 lb/hr per RTO limit. This monitoring consists of demonstrating that natural gas is the only fuel combusted in the RTOs. The DHI of each RTO is 6.6 MMBtu/hr, and the RTOs combust only natural gas with a heating value of 1,000 Btu/scf. The AP-42 emission factor for total PM (Table 1.4-2, dated July 1998) is 7.6 lb/ 10⁶ scf. Therefore, the maximum PM emission rate (PM_{rate}) per RTO, from natural gas combustion only, is given by:

$$PM_{rate} = \left(\frac{7.6 \text{ lb} / 10^6 \text{ scf}}{1,020 \frac{\text{lb} / 10^6 \text{ scf}}{\text{lb} / \text{MMBtu}}} \right) \left(\frac{1,000 \text{ Btu} / \text{scf}}{1,020 \text{ Btu} / \text{scf}} \right) 6.6 \text{ MMBtu} / \text{hr} \cdot \text{RTO}$$
$$PM_{rate} = 0.048 \frac{\text{lb}}{\text{hr} \cdot \text{RTO}}$$

This amount does not include any PM that is products of combustion of VOC and HAP. For the sake of this discussion, an *assumption* will be made that the products of combustion are not in amounts to exceed the 1.4 lb/hr-RTO limit. This seems like a reasonable engineering judgment since the maximum PM emission rate from each RTO (resulting from natural gas combustion only) is approximately $(0.048/1.4)(100) = 3.4\%$ of the limit. In theory, the heating value of natural gas and/or design heat input of the RTO would have to increase substantially to exceed the limit. But in practice, the required increase to exceed the limit is not possible without major modification of the RTOs. Although the monitoring of natural gas usage is technically the compliance demonstration for the PM emission rate limit, the usefulness, practical value, and necessity of such monitoring is questionable considering the calculation above. The PM emission rate limit will be carried over to the renewed permit as condition 4.1.1. However, for the reasons discussed, the permit writer intended not to carry over the current Title V monitoring condition E.1.b. But, the permittee has requested to keep this monitoring condition so that a statement that natural gas was the only fuel combusted will demonstrate

compliance. This monitoring will be simpler for the permittee, rather than performing calculations or some other more technical and complicated means of compliance demonstration.

c. **40 C.F.R. 63 Subpart KKKK – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans.**

Applicability

The sheet coaters C-1 through C-6 are subject to this NESHAP since the equipment performs *sheetcoating*, as described in §63.3481(a)(2), and are not excepted by §63.3481(c). The facility is considered *existing*, in accordance with §63.3482(e).

Compliance Date, Initial Compliance Period and Demonstration, and Notification of Compliance Status

The compliance date for the facility is determined by §63.3483(b), and is November 13, 2006. The initial compliance period begins on the compliance date, and ends on the last day of the twelfth month following the compliance date according to applicable requirement §63.3550(b)(3). Therefore, the end of the initial compliance period is November 30, 2007. According to §63.3550(b)(3), the initial compliance demonstration is performed during the initial compliance period in accordance with applicable requirements §63.3551 for the six (6) sheet coaters lines, the PTE emission capture system at the coaters, and the regenerative thermal oxidizer (Control Device ID 0001). The Notification of Compliance Status (NOCS) must be submitted no later than 30 calendar days following the end of the initial compliance period, in accordance with §63.3510(c). Thus, the NOCS must be submitted no later than December 30, 2007. The report must contain the information specified in §§63.3510(c)(1) through (9). In keeping with §63.3512(a), the permittee must maintain records of this notification, and documentation supporting the notification. The permittee submitted the NOCS, and it was received by DAQ on December 27, 2007. The permit writer reviewed the NOCS, and all items §§63.3510(c)(1) through (9) were included. Since this reporting requirement has been fulfilled, there will be no requirement in the permit concerning a compliance date, compliance period, or to submit an NOCS.

Emission Limits

For an existing affected source, §63.3490(b) limits organic HAP emissions to no more than those listed in Table 2 to 40 C.F.R. 63 Subpart KKKK, or the option to reduce organic HAP emissions according to Table 3 of Subpart KKKK. According to the application and the permittee's e-mails (dated 6/14/07 and 8/02/07) received from Mr. John Munsch (Ball), the permittee has elected to control HAP emissions according to Table 3 of Subpart KKKK, which is the *Control efficiency/outlet concentration option* specified in §63.3491(d). Under this option, the permittee must reduce emissions of total HAP by at least 95% (for existing sources), or achieve no more than 20 ppmvd at the control device outlet. The permittee will reduce organic HAP emissions by 95%, rather than employing the 20 ppmvd outlet concentration option. The *Control efficiency/outlet concentration option* requires the coater emissions' capture device to be a PTE as specified by EPA Method 204 of 40 C.F.R. Part 51, Appendix M. The permittee determined, via third-party testing in November 2006, that the enclosure for the coaters is a PTE according to Method 204. Therefore, the permittee may actually use either option (Table 2 or Table 3) stated above so long as the permittee uses the options in accordance with §63.3491, and documents and reports any switch between compliance options for any coating operation or group of coating operations. However, upon review of pre-draft permit documents, Mr. Munsch commented that the permittee will not be using the 95% reduction to comply with the MACT. This means that the 0.26 lbs HAP/gal solids limit from Table 2 will be the employed limit. Considering the fact that (i) the permittee may need flexibility to change between these two options in the future; and (ii) the rule language includes both limits with an "or statement," both limits will be included in the permit. Refer to permit condition 4.1.3., which contains an "or statement" between the 0.26 lbs limit and the 95 percent organic HAP reduction requirement. The language will not be unlike the applicable language in §63.3490(b).

Operating Limits

In accordance with §63.3492(b), the permittee must meet the operating limits specified in Table 4 to Subpart KKKK. These limits must be established during the performance test according to the requirements of §63.3556, and must be met at all times after they are established. The applicable requirements from Table 4 to Subpart KKKK are given below in Table A:

Table A – Operating Limits for the Sheet Coater Lines’ Control Devices and PTE Capture System

Device	Operating Limit	Continuous Compliance Demonstration
Regenerative Thermal Oxidizers (Control Device ID 0001)	a. Develop and implement a valve inspection plan according to §63.3556(c) (permit condition 4.2.3.); and	i. Maintaining an up-to-date valve inspection plan. If a problem is discovered during an inspection required by §63.3556(c), you must take corrective action as soon as practicable (permit condition 4.2.3.).
	b. Average combustion temperature recorded at the end of each 3-hour block period must not fall below the minimum combustion chamber temperature limit established according to §63.3556(a) (permit condition 4.1.1.).	ii. Collect the combustion temperature data according to §63.3557(c) (permit condition 4.2.1.);
		iii. Reducing the data to 3-hour block averages (permit condition 3.2.6.); and
		iv. Maintaining the 3-hour block average combustion temperature at or above the temperature limit established according to §63.3556(a) (permit condition 4.1.1.).
PTE emission capture system for coaters and ovens (Em. Unit IDs 001-01 through 001-12) ¹	a. The direction of the air flow at all times must be into the enclosure (permit condition 4.1.2.); and	i. Collecting the direction of air flow, and the pressure drop across the enclosure (permit condition 4.2.2.); and
	b. The pressure drop across the enclosure must be at least 0.007 inch H ₂ O, as established in Method 204 of appendix M to 40 C.F.R. Part 51 (permit conditions 4.1.2.).	ii. Maintaining the pressure drop at or above the pressure drop limit, and maintaining the direction of air flow into the enclosure at all times (permit conditions 4.1.2.).

1. The average minimum facial velocity of air indicator of 200-fpm has not been included in the second and third columns since the permittee will use a pressure measuring device in the PTE to ensure compliance with the minimum pressure drop, 0.007 inch of H₂O.

Note that the regenerative thermal oxidizers (Control Device ID 0001) are required by §63.3492(b) (which refers to Table 4 of Subpart KKKK) to have a *valve inspection plan*, written by the permittee in accordance with §63.3556(c). The context of §63.3556 is the establishment of operating limits (found in Table 4 of Subpart KKKK) during the performance testing, which according to §63.3550(b)(3), must have been performed prior to the compliance date discussed above. Therefore, the permittee should have already developed and submitted the valve inspection plan. The permit writer received a PDF format electronic copy of this plan from the permittee via e-mail on August 2, 2007. Inspection of key parameters (such as solenoid valve operation, air pressure, hydraulic pressure, etc.) and visual inspection of valves is deemed as monitoring. The *valve inspection plan* requirement also suggests the possibility of testing as a form of periodic monitoring. Since the plan is essentially a monitoring requirement, refer to permit condition 4.2.3. for the *valve inspection plan*.

Work Practice Plan

Since the permittee is using the *Emission rate with add-on control option* or the *Control Efficiency/outlet concentration option* to comply with emission limitations on the six (6) sheet coaters, §63.3493(b) requires the permittee to develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings. The plan must minimally contain the elements specified in §§63.3493(b)(1) through (5), and according to §63.3550(b)(2), the plan must be developed and implemented no later than the compliance date. In keeping with §63.3551(c), the permittee must document the implementation of the plan during the initial compliance period. The work practice plan is set forth as a facility-wide requirement (permit condition 3.1.16.) since it is applicable to multiple emission units, capture systems, and control devices. The §63.3550 series

citations (*Control Efficiency/outlet concentration option*) for permit condition 3.1.16. are applicable to the coaters on lines C-1 through C-6, while the §63.3540 series citations (*Emission rate with add-on control option*) refer to the coater lines PC-3, PC-4, PC-5, PC-6, and PC-7 which are discussed below in 4.c.

Startup, Shutdown, and Malfunction Plan (SSMP)

In accordance with §63.3500(c), the permittee must develop and implement a written SSMP according to the provisions in 40 C.F.R. §63.6(e)(3), for the sheet coaters, including their respective capture systems and regenerative thermal oxidizer (Control Device ID 0001). Since the SSMP encompasses multiple types of equipment (coaters, capture system, and thermal oxidizer), this permit condition will be listed under the facility-wide requirements as permit condition 3.1.17. As with the Work Practice Plan discussed above, the §63.3550 series citations for permit condition 3.1.17. are applicable to the coaters on lines C-1 through C-6, while the §63.3540 series citations refer to the coater lines PC-3, PC-4, PC-5, PC-6, and PC-7 (discussed below).

Testing

For the initial compliance demonstration completed during the initial compliance period, §63.3550(b)(3) requires use of the results of the performance testing conducted according to §§ 63.3553 (general requirements), 63.3554 (capture system efficiency), and 63.3555 (control device destruction efficiency). Therefore, performance testing must have been performed prior to the compliance date, which starts the initial compliance period. Since the compliance date (November 13, 2006) is in the past, there are no other performance tests to be completed, and there are no ongoing or periodic performance tests to comply with Subpart KKKK. Therefore, permit subsection 4.3. will not have any Subpart KKKK requirements.

Recordkeeping

The permittee must maintain a records in accordance with §§63.3512 and 63.3513. §63.3512(a) through (j) set forth recordkeeping requirements, while 63.3513 specifies the format and retention period requirements for all records. Refer to permit conditions 4.4.1., 4.4.2., 3.4.6., and 3.4.7.

Reporting

40 C.F.R. §63.3511 sets forth the requirements for the Subpart KKKK semiannual compliance report, which is to be distinguished from the semiannual monitoring report under permit condition 3.5.6., although the semiannual compliance report may be included with the semiannual monitoring report. All of the requirements in §63.3511(a) were reviewed by the permit writer, and edited in the permit only to reflect applicability to the permittee (permit condition 3.5.12.). It was noted in the permit writer's copy of Subpart KKKK that the paragraph under §63.3511(a) refers to (a)(1) through (7), and leaves out (8). The permit writer believes this is an involuntary omission since (8) requires reporting of deviations while using the *control efficiency/outlet concentration option*. This is an option that the permittee is using to demonstrate compliance with Subpart KKKK; therefore, the content of (a)(8) will be included in permit condition 3.5.12.

§63.3511(a)(1)(i) states that the first semiannual reporting period begins the day after the end of the initial compliance period. The last day of the initial compliance period is November 30, 2007 (as discussed above in 1.c.). So it was concluded by the permit writer that the first semiannual reporting period begins on December 1, 2007. The regulatory requirement also states that the first reporting period ends on June 30 or December 31, whichever occurs first following the end of the initial compliance period. In this case, December 31 occurs first. Therefore, the permit writer concludes that the first semiannual reporting period begins on December 1, 2007, and ends on December 31, 2007. Clearly, this is a very short reporting period, but this is the result of applying the regulatory language, and this is the only reporting period of this brevity. All subsequent reporting periods will cover 6-month periods. It is noteworthy that §63.3511(a)(1)(iv) allows the permittee to submit the first and subsequent compliance reports according to the dates established in permit condition 3.5.6. instead of

the dates in §63.3511(a)(1)(iii). This was concluded based upon two requirements in §63.3511(a)(1)(iv) being satisfied: (1) The permittee is subject to permitting regulations pursuant to 40 C.F.R. Part 70, which is State regulation 45CSR30 for Title V permitting; and (2) the WV DAQ has established dates for submitting semiannual reports pursuant to 40 C.F.R. §70.6(a)(3)(iii)(A), which are set forth in permit condition 3.5.6. Refer to permit condition 3.5.12. concerning the semiannual compliance report requirements.

Performance test reporting, required by §63.3511(b), is set forth as permit condition 3.5.13. The SSMP reporting required by §63.3511(c) is set forth as permit condition 3.5.14., and it cross-references the SSMP requirement in permit condition 3.1.17.

d. **40 C.F.R. Part 64 – Compliance Assurance Monitoring (CAM)**

The sheet coaters and ovens (Em. Unit IDs 001-01 through 001-12) emit VOC, HAP, and PM. The emissions from these sources are captured by an EPA Method 204 permanent total enclosure (PTE) and are routed to a regenerative thermal oxidizer (Control Device ID 0001). The emission units, capture systems, and control device are subject to 40 C.F.R. Part 64 for pollutants VOC and PM since the system meets all of the applicability criteria set forth by 40 C.F.R. §64.2(a) and is not exempt in accordance with §64.2(b). The applicable regulatory citation(s) of 40 C.F.R. 64 will be used with permit conditions that regulate emissions of VOC and PM. Though the capture and control system destroys HAP, it should be noted that 40 C.F.R. 64 does not directly apply to the control of HAP emissions from the emission units since the HAP emissions are regulated by the applicable requirements of 40 C.F.R. Part 63 Subpart KKKK.

The permit writer specified nine (9) excursions per 6-month reporting period as the threshold for triggering the development of a QIP (§64.8). This number per reporting period was the threshold proposed by the permittee for one of their other facilities (Ball Metal Food Container Corp., Facility ID 009-00027). The threshold was included in the Title V permit for Ball Metal Food Container Corp. (Permit R30-00900027-2007, Condition 6.2.12.).

The following Table B outlines the requirements of the CAM plan for the capture system and control device, which together control emissions from the sheet coaters and ovens.

Table B – CAM Plan for Sheet Coaters and Ovens (Em. Unit IDs: 001-01 through 001-12), PTE Capture System, and Regenerative Thermal Oxidizer (Control Device ID 0001)		
Criteria	Indicator No.1 of 2 ⁽¹⁾	Indicator No.2 of 2
I. Indicator Measurement Approach	Combustion chamber temperature (permit condition 4.2.1.)	Differential pressure at PTE (permit condition 4.2.2.)
	Thermocouple in combustion chamber with output to continuous data recorder (permit condition 4.2.1.)	Pressure sensor installed inside PTE with output to continuous data recorder (permit condition 4.2.2.)
II. Indicator Range QIP threshold	The temperature must be maintained at a minimum of 1,450 °F (4.1.1.). An excursion is defined as recorded temperature readings more than 50°F below the limit in 4.1.1. for a period of time in excess of 3 hours (permit conditions 4.2.1. and 4.4.1.). Excursions trigger an inspection and evaluation, corrective action, recordkeeping and a reporting requirement (permit conditions 3.4.4., 3.4.5., and 3.5.11.).	An excursion is defined as recorded differential pressure readings less than 90% of the limit in permit condition 4.1.2. for a period of time in excess of 30 minutes (permit conditions 4.2.2. and 4.4.1.). Excursions trigger an inspection and evaluation, corrective action, recordkeeping and a reporting requirement (permit conditions 3.4.4., 3.4.5., and 3.5.11.).
	No more than nine (9) excursions during a 6-month semiannual reporting period (permit conditions 3.2.7. and 3.2.8.).	No more than nine (9) excursions during a 6-month semiannual reporting period (permit conditions 3.2.7. and 3.2.8.).

Table B – CAM Plan for Sheet Coaters and Ovens (Em. Unit IDs: 001-01 through 001-12), PTE Capture System, and Regenerative Thermal Oxidizer (Control Device ID 0001)

Criteria	Indicator No.1 of 2 ⁽¹⁾	Indicator No.2 of 2
III. Performance Criteria		
- Data Representativeness	The thermocouple is located in the incinerator combustion chamber. The sensor must have an accuracy of $\pm 1.2^{\circ}\text{C}$ or ± 1.0 percent of the temperature being measured expressed in degrees Celsius, whichever is greater (permit conditions 4.2.1., and 4.3.1.).	The pressure sensor is installed inside the PTE capture hood. The device will have an accuracy sufficient to demonstrate compliance with appropriate pressure limits/thresholds (permit condition 4.2.2. and 4.3.2.).
- Verification of Operational Status	The permittee has proposed to perform monthly verification of data collection to ensure proper recordkeeping by checking if there are any gaps in the data acquisition due to software problems (permit condition 3.2.2.).	The permittee has proposed, to perform monthly verification of data collection to ensure proper recordkeeping by checking if there are any gaps in the data acquisition due to software problems (permit condition 3.2.2.).
- QA/QC Practices and Criteria	The thermocouple must be calibrated minimally on an annual basis and properly maintained (permit conditions 4.3.1. and 3.2.4.).	The pressure transducer must be calibrated minimally on an annual basis and properly maintained (permit condition 4.3.2. and 3.2.4.).
- Monitoring frequency	Measured continuously (permit conditions 3.2.3., 3.2.5., and 3.2.6.)	Measured continuously (permit conditions 3.2.3., 3.2.5., and 3.2.6.)
- Data Collection Procedure	Data point collected at least every 20 seconds (permit condition 3.2.6.)	Data point collected at least every 20 seconds (permit condition 3.2.6.)
- Averaging Period	45 consecutive points averaged for one (1) 15-minute interval. One average number recorded every 15 minutes and four numbers recorded per hour at evenly spaced intervals (permit condition 3.2.6.).	45 consecutive points averaged for one (1) 15-minute interval. One average number recorded every 15 minutes and four numbers recorded per hour at evenly spaced intervals (permit condition 3.2.6.).

(1) Indicator No.1 of 2 in Table B is the same as Indicator No. 1 of 2 in Table H below in section 4.d.

2. LTG-1 Sheet Coater and Oven (Emission Unit ID 007-01 and 007-02), Emissions Capture System, and Thermal Oxidizer (Control Device ID 0003)

The permittee plans to replace one existing sheetcoating line (Em. Unit ID: LTG C-7) with a new line (Em. Unit ID: LTG-1). The new line will have its own thermal oxidizer (Control Device ID: 0003), and is expected to achieve VOC/HAP destruction efficiencies greater than 98 percent. Additionally, the new coater will have a permanent total enclosure (Method 204 PTE) to ensure capture of 100 percent of the emissions and route them through the oven and into the thermal oxidizer. It should be noted that when existing line LTG C-7 was permitted for construction, another identical line was permitted as well, but it was never installed. An application to install the new line LTG-1 was received by DAQ on November 2, 2007, which precipitated permit R13-2295C. The permittee stated in the application for R13-2295C that if the construction permit is issued in March 2008, installation would begin late in the first quarter of 2008 and startup would occur mid-second quarter 2008.

a. R13-2295C Conditions

Condition 4.1.1. formally revokes permission to install old coating line LTG2, which was never installed even though it was permitted for construction. Refer to permit condition 5.1.6.

Condition 4.1.2. requires the permittee to remove the existing coater LTG C-7 from service prior to the new coater LTG-1 commencing service. Refer to permit condition 5.1.7.

Condition 4.1.3. requires a 97% reduction in HAPs for the new LTG-1 coater. This efficiency was proposed by the permittee in the emission reduction calculations submitted in application R13-2295C. Therefore, regardless of the 40 C.F.R. 63 Subpart KKKK limit that will be complied with, this

destruction efficiency for LTG-1 has been established in the R13 permit. Refer to Title V permit condition 5.1.8.

Condition 4.1.4. requires use of a permanent total enclosure (PTE) for the new LTG-1 coater. Use of a PTE is required if the permittee elects to comply with the 97% *control efficiency/outlet concentration option* under §63.3491(d). The Subpart KKKK discussion below demonstrates that the permittee may also (and likely will) comply with the 0.26 lb HAPs/gal solids limit in §63.3490(b) (which does not require the use of a PTE, although one can be used for this option). The PTE requirement has been set forth as permit condition 5.1.2.

Condition 4.1.5. sets forth the requirement for the construction of a Permanent Total Enclosure (PTE, which is defined by US EPA Method 204 in Appendix M of 40 C.F.R. 51), to capture emissions from the LTG-1 coater. Refer to permit condition 5.1.4.

Condition 4.1.6. requires the LTG-1 coater to be integrated into the work practice plan required by 40 C.F.R. §63.3493(b). The plan is discussed below, and the requirement is permit condition 3.1.16. Condition 4.1.7. perpetuates condition 4.1.6. This condition has also been cited in 3.1.16.

Condition 4.1.8. sets the minimum combustion chamber temperature for the thermal oxidizer controlling emissions from LTG-1. This has been set forth as permit condition 5.1.3.

Condition 4.1.9. requires the written SSMP, which is discussed below under 40 C.F.R. 63 Subpart KKKK. Refer to permit condition 3.1.17.

Condition 4.1.10. limits the VOC and HAP emissions from both the LTG-1 coater and the Planeta Press (discussed below). Note that permit condition 5.1.5. will only contain the limits for LTG-1. The limits for the Planeta Press will be in condition 6.1.2.

b. 40 C.F.R. 63 Subpart KKKK – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans

Applicability

The LTG-1 sheet coater will be subject to this NESHAP since the equipment will perform *sheetcoating*, as described in §63.3481(a)(2), and are not excepted by §63.3481(c). The coater is considered a new installation for the Weirton facility. Subpart KKKK applies to each new, reconstructed, and existing affected source (§63.3482(a)). The definition of an *affected source* is given in 40 C.F.R. §63.2, which states that an *affected source* “...means the collection of equipment, activities, or both within a single contiguous area and under common control...” From this definition, it was determined by the writer that the Weirton facility as a whole is the *affected source*, and based upon its construction date, it is existing for application of Subpart KKKK. Therefore, the LTG-1 line that is to be installed is not a *new affected source*, and LTG-1 itself does not have to comply with the Subpart KKKK requirements that are applicable to a *new affected source*.

Compliance Date, Initial Compliance Period and Demonstration, and NOCS

The compliance date for the coater LTG-1 is determined by §63.3483(b), and is November 13, 2003. Since this date is in the past, it stands to reason that the LTG-1 must be in compliance with Subpart KKKK upon startup.

Emission Limits

For an existing affected source, §63.3490(b) limits organic HAP emissions to no more than those listed in Table 2 to 40 C.F.R. 63 Subpart KKKK, or the option to reduce organic HAP emissions according to Table 3 of Subpart KKKK. For the sheet coater LTG-1, the permittee has elected to control HAP emissions according to Table 3 of Subpart KKKK, which is the *Control efficiency/outlet concentration option* specified in §63.3491(d). Under this option, the permittee must reduce emissions of total HAP

from new sources by 95 percent, or achieve no more than 20 ppmvd at the control device outlet. The permittee will reduce emissions by 95 percent, rather than employing the outlet concentration option. The *Control Efficiency/outlet concentration option* requires the coater emissions' capture device to be a PTE as specified by EPA Method 204 of 40 C.F.R. Part 51, Appendix M. The permittee may actually use either compliance option (in Table 2 or Table 3) so long as the permittee uses the options in accordance with §63.3491, and documents and reports any switch between compliance options for any coating operation or group of coating operations. Since the permittee may also need flexibility to use the option under Table 1, the sheetcoating limit of 0.26 lb HAPs/gal solids limit has also been included in permit condition 5.1.1.

Operating Limits

In accordance with §63.3492(b), the permittee must meet the operating limits specified in Table 4 to Subpart KKKK. These limits must be established during the performance test according to the requirements of §§ 63.3550(a) and 63.3556(a), and must be met at all times after they are established. The applicable requirements from Table 4 to Subpart KKKK are given below in Table C:

Table C – Operating Limits for the LTG-1 Coater Line, Control Device, and PTE Capture System

Device	Operating Limit	Continuous Compliance Demonstration
Integrated Thermal Oxidizer (Control Device ID: 0003)	a. Average combustion temperature in each 3-hour block period must not fall below the combustion temperature limit established according to §63.3556(a) (5.1.3.).	i. Collect the combustion temperature data according to §63.3557(c) (3.2.9., 5.2.1.);
		ii. Reducing the data to 3-hour block averages (3.2.6.); and
		iii. Maintaining the 3-hour block average combustion temperature at or above the temperature limit established according to §63.3556(a) (5.1.3.).
PTE emission capture systems for LTG-1 coater (Em. Unit ID 007-01) ¹	a. The direction of the air flow at all times must be into the enclosure (5.1.4.); and	i. Collecting the direction of air flow, and the pressure drop across the enclosure (5.2.2.); and
	b. The pressure drop across the enclosure must be at least 0.007 inch H ₂ O, as established in Method 204 of appendix M to 40 C.F.R. Part 51 (5.1.4.).	ii. Maintaining the pressure drop at or above the pressure drop limit, and maintaining the direction of air flow into the enclosure at all times (5.1.4.).

1. The average minimum facial velocity of air indicator of 200-fpm has not been included in the second and third columns in Table C since the permittee will use a pressure measuring device in the PTE to ensure compliance with the minimum pressure drop, 0.007 inch of H₂O.

Work Practice Plan

Since the permittee is using the *Control efficiency/outlet concentration option* to comply with applicable emission limitations for the LTG-1 sheet coater line, §63.3493(b) requires the permittee to develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings. The LTG-1 coater line must be included in the plan, which has been discussed above in Determination and Justifications, 1.c. Refer to permit condition 3.1.16. It should be noted that LTG-1 must be included in the plan upon startup of LTG-1, according to §63.3550(a)(2).

Startup, Shutdown, and Malfunction Plan (SSMP)

In accordance with §63.3500(c), the permittee must develop and implement a written SSMP according to the provisions in 40 C.F.R. §63.6(e)(3), for the LTG-1 coater, including the capture system and thermal oxidizer (Control Device ID 0003). Since the SSMP encompasses multiple types of equipment (coaters, capture system, and thermal oxidizer), this permit condition will be listed under the facility-wide requirements as permit condition 3.1.17.

Testing

Applicable requirement §63.3550(a)(1) requires the permittee to conduct a performance test to establish the operating limits required by §63.3492 no later than 180 days after the applicable compliance date (i.e., initial startup date for LTG-1). For this testing, refer to permit condition 5.3.4.

Recordkeeping

For the time period between initial startup and completion of the performance testing, the recordkeeping requirement §63.3550(a)(4) has been set forth as condition 5.4.5. Also, refer to the discussion of recordkeeping in 1.c. of this Fact Sheet, which is applicable to the LTG-1 coater. Refer to permit conditions 5.4.2., 5.4.3., 3.4.6., and 3.4.7.

Reporting

The reporting requirements pursuant to Subpart KKKK for the LTG-1 coater are set forth in the following Table D.

Table D

Applicable Requirement	Description of Requirement	Permit Condition
§63.3511(a)	Semiannual compliance report (due dates, general, contents)	3.5.12.
§63.3511(b)	Reporting of performance test results	3.5.13.
§63.3511(c)	Startup, shutdown, malfunction reports	3.5.14.

In keeping with the applicability discussion above, the NOCS is required for the *affected source* (i.e., the existing facility as a whole), and not for an individual emission unit, such as the new LTG-1 coater. Therefore, there is no separate NOCS requirement for the LTG-1 line alone.

c. **40 C.F.R. Part 64 – Compliance Assurance Monitoring (CAM)**

The LTG-1 sheet coater and oven (Em. Unit IDs 007-01 and 007-02) emit VOC, HAP, and other criteria pollutants (listed in the application). The emissions from these sources are captured by an EPA Method 204 permanent total enclosure (PTE) and are routed to an integrated thermal oxidizer (Control Device ID 0003). The emission units, capture systems, and control device are subject to 40 C.F.R. Part 64 for pollutants they emit, except HAP, since the system meets all of the applicability criteria set forth by 40 C.F.R. §64.2(a) and is not exempt in accordance with §64.2(b). The applicable regulatory citation(s) of 40 C.F.R. 64 will be used with permit conditions that regulate emissions of pollutants other than HAP. Though the capture and control system destroys HAP, it should be noted that 40 C.F.R. 64 does not directly apply to the control of HAP emissions from the emission units since the HAP emissions are regulated by the applicable requirements of 40 C.F.R. Part 63 Subpart KKKK.

The following Table E outlines the requirements of the CAM plan for the capture system and control device, which together control emissions from the LTG sheet coater and oven.

Table E – CAM Plan for LTG-1 Coater and Oven (Em. Unit IDs: 007-01 and 007-02), PTE Capture System, and Thermal Oxidizer (Control Device ID: 0003)		
Criteria	Indicator No.1 of 2	Indicator No.2 of 2
I. Indicator Measurement Approach	Combustion chamber temperature (permit condition 5.2.1.)	Differential pressure at PTE (permit condition 5.2.2.)
	Thermocouple in combustion chamber with output to continuous data recorder (permit condition 5.2.1.)	Pressure sensor installed inside PTE with output to continuous data recorder (permit condition 5.2.2.)
II. Indicator Range	The temperature must be maintained at a minimum of 1,400 °F (5.1.3.). An excursion is defined as recorded temperature readings more than 50°F	An excursion is defined as recorded differential pressure readings less than 90% of the limit in permit condition 5.1.4. for a period of time in excess of 30

Table E – CAM Plan for LTG-1 Coater and Oven (Em. Unit IDs: 007-01 and 007-02), PTE Capture System, and Thermal Oxidizer (Control Device ID: 0003)		
Criteria	Indicator No.1 of 2	Indicator No.2 of 2
QIP threshold	below the limit in 5.1.3. for a period of time in excess of 3 hours (permit conditions 5.2.1.). Excursions trigger an inspection and evaluation, corrective action, recordkeeping and a reporting requirement (permit conditions 3.4.4., 3.4.5., and 3.5.11.).	minutes (permit condition 5.2.2.). Excursions trigger an inspection and evaluation, corrective action, recordkeeping and a reporting requirement (permit conditions 3.4.4., 3.4.5., and 3.5.11.).
	No more than nine (9) excursions during a 6-month semiannual reporting period (permit conditions 3.2.7. and 3.2.8.).	No more than nine (9) excursions during a 6-month semiannual reporting period (permit conditions 3.2.7. and 3.2.8.).
III. Performance Criteria		
- Data Representativeness	The thermocouple is located in the incinerator combustion chamber as an integral part of the incinerator design. The sensor must have an accuracy of $\pm 1.2^{\circ}\text{C}$ or ± 1.0 percent of the temperature being measured expressed in degrees Celsius, whichever is greater (permit condition 5.2.1.).	The pressure sensor is installed inside the PTE capture hood. The device will have an accuracy sufficient to demonstrate compliance with appropriate pressure limits/thresholds (permit condition 5.2.2. and 5.3.3.).
- Verification of Operational Status	The permittee has proposed to perform monthly verification of data collection to ensure proper recordkeeping by checking if there are any gaps in the data acquisition due to software problems (permit condition 3.2.2.).	The permittee has proposed, to perform monthly verification of data collection to ensure proper recordkeeping by checking if there are any gaps in the data acquisition due to software problems (permit condition 3.2.2.).
- QA/QC Practices and Criteria	The thermocouple must be calibrated minimally on an annual basis and properly maintained (permit conditions 5.3.2. and 3.2.4.).	The pressure transducer must be calibrated minimally on an annual basis and properly maintained (permit condition 5.3.3. and 3.2.4.).
- Monitoring frequency	Measured continuously (permit conditions 3.2.3., 3.2.5., and 3.2.6.).	Measured continuously (permit conditions 3.2.3., 3.2.5., and 3.2.6.).
- Data Collection Procedure	Data point collected at least every 20 seconds (permit condition 3.2.6.).	Data point collected at least every 20 seconds (permit condition 3.2.6.).
- Averaging Period	45 consecutive points averaged for one (1) 15-minute interval. One average number recorded every 15 minutes and four numbers recorded per hour at evenly spaced intervals (permit condition 3.2.6.).	45 consecutive points averaged for one (1) 15-minute interval. One average number recorded every 15 minutes and four numbers recorded per hour at evenly spaced intervals (permit condition 3.2.6.).

d. **Recordkeeping**

Condition 4.4.1. is a general recordkeeping requirement, and has been cited in “boilerplate” condition 3.4.1.

Condition 4.4.4. is a recordkeeping requirement for both LTG-1 and the Planeta Press. This most recent NSR permit no longer requires the permittee to report the records every quarter. The permittee now must only keep such records on hand, and be able to certify and report them at the Secretary’s request. This requirement is permit condition 5.4.1.

3. **Planeta Press and Coater, Line PC-8 (Emission Unit IDs 006-01 and 006-02)**

a. **R13-2295C Conditions**

Condition 4.1.10. sets the VOC and HAP limits for this equipment. Refer to permit condition 6.1.2.

Condition 4.4.4. is a recordkeeping requirement for both LTG-1 and the Planeta Press. This most recent permit no longer requires the permittee to report the records every quarter. The permittee now must only keep such records on hand, and be able to certify and report them at the Secretary's request. This requirement is permit condition 6.4.4.

b. **40 C.F.R. 63 Subpart KKKK – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans**

Applicability

The Planeta Press and Coater line PC-8 is subject to this NESHAP since the equipment performs *sheetcoating*, as described in §63.3481(a)(2), and is not excepted by §63.3481(c). The equipment will comply with the requirements for an *existing affected source*, in accordance with §63.3482(e).

Compliance Date, Initial Compliance Period and Demonstration, and NOCS

Since the Planeta Press is part of an *existing* affected source, the requirements for the compliance date, initial compliance period and demonstration, and the NOCS related to the Line PC-8 are identical to those requirements discussed above (in Determination and Justifications, 1.c.) for the coater lines C-1 through C-6. The initial compliance period and demonstration are described in §63.3530 specifically for the *Emission rate without add-on control option* (compliance option described in §63.3491(b)), which will be used to demonstrate compliance with the applicable emission limit.

Emission Limits

In accordance with §63.3490(b), the Planeta Press PC-8 will meet the applicable emission limit in Table 2 of Subpart KKKK, which is 0.26 lb HAP/gal solids. The permittee has stated in technical correspondence (8/02/07 e-mail) that compliance with the emission limit will be achieved by employing the *Emission rate without add-on control option*, given under §63.3491(b). To demonstrate initial compliance using the *Emission rate without add-on control option*, the permittee has elected to use the procedures prescribed in §63.3531(a) through (g).

The writer noticed in the NOCS that the permittee averaged all sixteen coaters at the facility to determine compliance during the initial compliance demonstration. These coaters include the four (4) lines C-1 through C-4 in Building 33 (permit part 1 of 2, issued on March 28, 2007). From Building 720 (permit part 2 of 2; *i.e.*, this renewal) the quantity includes coaters C-1 through C-6, LTG C-7, PC-4, PC-5, PC-6, PC-7, and the Planeta Press PC-8. According to the renewal application, line PC-3 is removed from service. However, according to the permittee's comments on the pre-draft permit (3/14/08 email), PC-3 has not been removed from service. Furthermore, the NOCS specifically states that the Planeta Press (Em. Unit ID 006-01, 006-02) was included in the averaging. The point of this discussion is that the Planeta Press PC-8 is complying with the MACT using the *Emission rate without add-on control option*, given under §63.3491(b). The other coaters are complying using the *Emission rate with add-on control option*, given under §63.3491(c). According to §63.3541(a), "When calculating the organic HAP emission rate according to this section, do not include any coatings or thinners used on coating operations for which you use the compliant material option, the emission rate without add-on controls option, or the control efficiency/outlet concentration option." Clearly, the MACT does not allow "averaging" of coatings, thinners, emissions, etc. between equipment using the *Emission rate with add-on control option* and equipment using *Emission rate without add-on control option*. Furthermore, this type of exclusive language is found in each of the four compliance options (*i.e.*, §§ 63.3521, 63.3531, 63.3541, 63.3551), and is therefore not limited to this particular combination of compliance options. To ensure that this stipulation of not "averaging" between compliance options is met, permit condition 3.1.15. has been written as a facility-wide condition

concerning all units using the *Emission rate with add-on control option* (the predominant option being employed). Similarly, condition 6.4.2. for the Planeta Press PC-8 has been written to ensure that materials used on sources using other compliance options are not included with the Planeta Press, which is using the *Emission rate without add-on control option*.

§63.3531(h) specifies the requirements for the initial compliance demonstration, while §63.3532 sets forth the requirements for demonstrating continuous compliance with the applicable emission limit. These requirements, along with the corresponding permit conditions, are described in the following Table F:

Table F

Applicable Requirement	Description of Requirement	Permit Condition(s)
§63.3531(h)	Organic HAP emission rate for initial 12-month compliance period must be less than or equal to the applicable emission limit; keep appropriate records per §§ 63.3512 and 63.3513; NOCS contents.	6.1.1., 6.4.1., 6.4.3., 3.4.6., 3.4.7.
§63.3532(a)	The organic HAP emission rate must not exceed the applicable emission limit. A 12-month compliance period is defined.	6.1.1.
§63.3532(b)	If the organic HAP emission rate for any 12-month compliance period exceeds the applicable emission limit, this is a deviation and must be reported according to §§63.3510(c)(6) and 63.3511(a)(6).	6.5.1., 3.5.12.
§63.3532(c)	Semiannual compliance report requirements.	6.5.1., 3.5.12.
§63.3532(d)	Must maintain records according to §§ 63.3512 and 63.3513.	6.4.1., 6.4.3., 3.4.6., 3.4.7.

Non-Applicability of Operating Limits, Work Practice Standards, Work Practice Plan and SSM Plan to the Planeta Press only

The *Emission rate without add-on control option* set forth in §63.3491(b) will be used by the permittee to meet the applicable emission limit for the Planeta Press. According to §63.3492(a) and §63.3531, the permittee is not required to meet any operating limits for emission units, capture systems, or control devices where the *Emission rate without add-on control option* is used. According to §63.3493(a) and §63.3531, there are no specific work practice standards to meet (for the Planeta Press only) since the *Emission rate without add-on control option* will be used. Based upon the non-applicability of requirements in §63.3493(b) and §63.3500(c) to the Planeta Press, it was concluded that the Planeta Press does not have to be included in either the Work Practice Plan or the SSM Plan, respectively (permit conditions 3.1.16 and 3.1.17.).

Testing

The applicable procedures set forth in §63.3531(a), (b), and (c) either directly refer to test methods, or refer to methods already set forth in §63.3521 (*compliant material option*). For instance, applicable requirement §63.3531(a) refers to §63.3521(a), which allows five different options for determining the mass fraction of organic HAP for each material used. According to technical correspondence (8/02/2007 e-mail), the permittee will use information from the supplier or manufacturer of the material (§63.3521(a)(4)) to determine mass fraction of HAP. This particular option states that if there is ever disagreement between the manufacturer's information and the results of any testing conducted according to §63.3521(a)(1) through (3), then test results will take precedence (unless successfully demonstrated by the permittee that they should not). The point of the preceding discussion is that there is a possibility of future testing. However, there are no current or ongoing testing requirements pursuant to Subpart KKKK for the Planeta Press PC-8.

Recordkeeping

Applicable requirement §63.3531(h) requires the permittee to maintain records in accordance with §§63.3512 and 63.3513. Refer to permit conditions 3.4.6. and 3.4.7., which contain the requirements associated with the *Emission rate without add-on control option*.

Reporting

Reporting has been discussed above in 1.c. of this Fact Sheet. It should be noted that applicable requirement §63.3531(h) requires submitting of a statement of compliance within the NOCS. Refer to permit condition 3.5.12. regarding the semiannual compliance report requirements.

Non-applicability of Performance Test Reports and Startup, Shutdown, Malfunction Reports to the Planeta Press only

The Performance Test Reports (permit condition 3.5.13.) and Startup, Shutdown, Malfunction Reports (permit condition 3.5.14.) are only required for equipment that comply with applicable emission limits using the *Emission rate with add-on controls option* or the *Control efficiency/outlet concentration option*. Since the Planeta Press does not use either of these options, but instead will use the *Emission rate without add-on control option*, these reports are not applicable for the Planeta Press.

c. **40 C.F.R. Part 64 – Compliance Assurance Monitoring (CAM)**

The Planeta press does not use a *control device* (which is defined in 40 C.F.R. §64.1, and that definition was used for this non-applicability determination) to achieve compliance with any emission limitation or standard; therefore, the Planeta press is exempt from 40 C.F.R. Part 64 since it does not meet the applicability requirement in 40 C.F.R. §64.2(a)(2). The reason this statement of non-applicability is given here and not in the Non-applicability Determinations section of this Fact Sheet is due to 40 C.F.R. Part 64 being applicable to other emission units and emission control devices at the facility.

4. **Coater Lines PC-3 through PC-7 (003-03, 003-05, 003-07, 003-09), Emissions Capture System, and Regenerative Thermal Oxidizers (Control Device ID 0001)**

a. **R13-2295C Conditions**

There are no conditions in R13-2295C that directly regulate the lithography presses. However, there are requirements (e.g., 4.1.13.) affecting the regenerative thermal oxidizer (Control Device ID 0001) which controls the emissions from the presses. Such requirements have been discussed above in Section 1 of Determinations and Justifications, and the requirements will appear in the permit as previously discussed.

b. **45CSR6 – To Prevent and Control Air Pollution from Combustion of Refuse**

The emissions of VOC and HAP from the coaters and ovens are destroyed by the regenerative thermal oxidizer identified as Control Device ID 0001, which subsequently emits particulate matter. Active permit R30-00900015-2002, condition E.1.a., specified a PM emission limit of 1.4 lb per hour per RTO. The underlying requirement for the permit condition is 45CSR§6-4.1. Condition E.1.b. established the monitoring required to demonstrate compliance with the 1.4 lb/hr per RTO limit. There have been no changes in the facility that necessitate alteration of the PM limit or associated monitoring. Therefore, the same requirements have been established in the renewal permit as conditions 7.1.3. and 7.2.4.

c. **40 C.F.R. 63 Subpart KKKK – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans**

Applicability

The sheet coaters are subject to this NESHAP since the equipment performs *sheetcoating*, as described in §63.3481(a)(2), and are not excepted by §63.3481(c). The emission units are part of a facility that is considered *existing*, in accordance with §63.3482(e).

Compliance Date, Initial Compliance Period and Demonstration, and NOCS

The requirements for the compliance date, initial compliance period and demonstration, and the NOCS related to the coater lines PC-3 through PC-7 are identical to those requirements discussed above (in Determination and Justifications, 1.c.) for the coater lines C-1 through C-6. Refer to permit condition 3.1.15. regarding the compliance date, initial compliance period, and initial compliance demonstration.

Emission Limits and Operating Limits

For an existing affected source, §63.3490(b) limits organic HAP emissions to no more than those listed in Table 2 to 40 C.F.R. 63 Subpart KKKK (0.26 lb HAP/gal solids), or the option to reduce organic HAP emissions according to Table 3 of Subpart KKKK (95% HAP emissions reduction or outlet concentration of 20 ppmvd). The Table 3 compliance options are specific to the *Control Efficiency/outlet concentration option* specified in §63.3491(d), which requires the emissions capture device be a Method 204 PTE. The enclosure around the coaters is not a Method 204 PTE. Therefore, the *Control Efficiency/outlet concentration option* specified in §63.3491(d) may not be used for these coaters to comply with Subpart KKKK, and therefore the 95% reduction or 20 ppmvd limits cannot be applied to these coaters. The permittee stated in the renewal application (*i.e.*, Attachment E) and in technical correspondence (6/14/2007 e-mail to the permit writer) that these coaters will comply with the 0.26 lb HAP/gal solids limit in Table 2 to Subpart KKKK. Compliance with the HAP limit will be demonstrated using the *Emission rate with add-on controls option* specified in §63.3491(c) which employs continuous monitoring of the regenerative thermal oxidizer (Control Device ID 0001) combustion chamber temperature and oxidizer inlet duct pressure according to applicable requirements.

The applicable operating limits are set forth in §63.3492(b), which refers to Table 4 of Subpart KKKK. These limits must be established during the performance test according to the requirements of §63.3546, and must be met at all times after they are established. The parameters have already been established since the compliance date is in the past. The applicable requirements from Table 4 to Subpart KKKK are given below in Table G:

Table G – Operating Limits for PC-3 through PC-7 Coater Lines’ Control Devices and Non-PTE Capture System

Device	Operating Limit	Continuous Compliance Demonstration
Regenerative Thermal Oxidizers (Control Device ID 0001)	a. Develop and implement a valve inspection plan according to §63.3546(c) (permit condition 4.2.3.); and	i. Maintaining an up-to-date valve inspection plan. If a problem is discovered during an inspection required by §63.3546(c), you must take corrective action as soon as practicable (permit condition 4.2.3.).
	b. Average combustion temperature in each 3-hour block period must not fall below the combustion temperature limit established according to §63.3546(a) (permit condition 4.1.1.).	ii. Collect the combustion temperature data according to §63.3547(c) (permit condition 7.2.3. and 4.2.1.);
		iii. Reducing the data to 3-hour block averages; and (permit condition 3.2.6.)
		iv. Maintaining the 3-hour block average combustion temperature at or above the temperature limit established according to §63.3546(a) (permit condition 4.1.1.).
Non-PTE emission capture system for coaters (Em. Unit IDs 003-01, 003-03, 003-05, 003-07, 003-09)	a. The average duct static pressure, in each duct between a capture device and the regenerative thermal oxidizer inlet, in each 3-hour period (permit condition 3.2.6.b.) must not fall below the duct pressure limit (permit condition 7.1.2.) established for that capture device according to §63.3547(g).	i. Collecting the duct static pressure for each capture device according to §63.3546(g) (permit condition 7.2.2.);
		ii. Reducing the data to 3-hour block averages; and (permit condition 3.2.6.b.)
		iii. Maintaining the 3-hour block average duct static pressure for each capture device at or above the duct static pressure limit (permit condition 7.1.2.).

Work Practice Plan

Since the permittee is using the *Emission rate with add-on control option* to comply with emission limitations on the coaters, §63.3493(b) requires the permittee to develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings. The plan has been discussed above in 1.c. of this Fact Sheet. Refer to permit condition 3.1.16.

Startup, Shutdown, and Malfunction Plan (SSMP)

Since the sheet coaters use an emissions capture system and regenerative thermal oxidizer (Control Device ID 0001) to comply with Subpart KKKK, §63.3500(c) requires the permittee to include the coaters, capture devices, and control devices in a written SSMP as previously discussed in 1.c. of this Fact Sheet. Refer to permit condition 3.1.17.

Testing

For the initial compliance demonstration completed during the initial compliance period, §63.3540(b)(3) requires use of the results of the performance testing conducted according to §§ 63.3543 (general requirements), 63.3544 (capture system efficiency), and 63.3545 (control device destruction efficiency). Therefore, performance testing must have been performed prior to the compliance date, which starts the initial compliance period. Since the compliance date (November 13, 2006) is in the past, there are no other performance tests to be completed, and there are no ongoing or periodic performance tests to comply with Subpart KKKK. Therefore, permit subsection 7.3. will not have any Subpart KKKK requirements.

Recordkeeping

The permittee must maintain a records in accordance with §§63.3512 and 63.3513. Specific to the coaters, which are using the *Emission rate with add-on controls option*, §63.3512(c)(4) requires records of the calculations specified in §63.3512(c)(4)(i)-(v). Refer to permit condition 3.4.6.

Reporting

§63.3511 sets forth the requirements for the Subpart KKKK semiannual compliance report, which is discussed above in 1.c. Refer to permit condition 3.5.12. for the semiannual compliance report requirements for the coaters.

d. **40 C.F.R. Part 64 – Compliance Assurance Monitoring (CAM)**

The sheet coaters emit VOC and HAP, which are captured by a hood over each coater and routed to the regenerative thermal oxidizers (Control Device ID 0001). The emission units, capture systems, and control device are subject to 40 C.F.R. Part 64 for the pollutant VOC since the system meets all of the applicability criteria set forth by 40 C.F.R. §64.2(a) and is not exempt in accordance with §64.2(b). The applicable regulatory citation(s) of 40 C.F.R. 64 will be used with permit conditions that set forth monitoring/recordkeeping/reporting (MRR) requirements for control of VOC emissions. Though the capture and control system destroys HAP emitted from the coaters, it should be noted that 40 C.F.R. 64 does not directly apply to the control of HAP emissions from the emission units since the HAP emissions are regulated by the applicable requirements of 40 C.F.R. Part 63 Subpart KKKK. The following Table H outlines the requirements of the CAM plan for the capture system and control device, which together control emissions from the sheet coaters PC-3 through PC-7.

Table H – CAM Plan for Sheet Coaters and Ovens (Em. Unit IDs: 003-03, 003-04, 003-05, 003-06, 003-07, 003-08, 003-09, 003-10), non-PTE Hood-type Emissions Capture System, and Regenerative Thermal Oxidizer (Control Device ID 0001)

Criteria	Indicator No.1 of 2 ⁽¹⁾	Indicator No.2 of 2
I. Indicator	Combustion chamber temperature (permit condition 4.2.1.)	Differential pressure at oxidizer inlet duct (permit condition 7.2.2.)
Measurement Approach	Thermocouple in combustion chamber with output to continuous data recorder (permit condition 4.2.1.)	Pressure sensor installed inside oxidizer inlet duct with output to continuous data recorder (permit condition 7.2.2.)
II. Indicator Range	The temperature must be maintained at a minimum of 1,450 °F (4.1.1.). An excursion is defined as recorded temperature readings more than 50°F below the limit in 4.1.1. for a period of time in excess of 3 hours (permit conditions 7.2.3., and 4.2.1.). Excursions trigger an inspection and evaluation, corrective action, recordkeeping and a reporting requirement (permit conditions 3.4.4., 3.4.5., and 3.5.11.).	An excursion is defined as recorded differential pressure readings less than 90% of the limit in permit condition 7.1.2. for a period of time in excess of 30 minutes (permit conditions 7.2.2.). Excursions trigger an inspection and evaluation, corrective action, recordkeeping and a reporting requirement (permit conditions 3.4.4., 3.4.5., and 3.5.11.).
QIP threshold	No more than nine (9) excursions during a 6-month semiannual reporting period (permit conditions 3.2.7. and 3.2.8.).	No more than nine (9) excursions during a 6-month semiannual reporting period (permit conditions 3.2.7. and 3.2.8.).
III. Performance Criteria		
- Data Representativeness	The thermocouple is located in the incinerator combustion chamber as an integral part of the incinerator design. The sensor must have an accuracy of ± 1.2 °C or ± 1.0 percent of the temperature being measured expressed in degrees Celsius, whichever is greater (permit condition 4.2.1., and 4.3.1.).	The pressure sensor is installed inside the oxidizer inlet duct. The device will have an accuracy sufficient to demonstrate compliance with appropriate pressure limits/thresholds (permit conditions 7.3.1.).
- Verification of Operational Status	The permittee has proposed to perform monthly verification of data collection to ensure proper recordkeeping by checking if there are any gaps in the data acquisition due to software problems (permit condition 3.2.2.).	The permittee has proposed, to perform monthly verification of data collection to ensure proper recordkeeping by checking if there are any gaps in the data acquisition due to software problems (permit condition 3.2.2.).
- QA/QC Practices and Criteria	The thermocouple must be calibrated minimally on an annual basis and properly maintained (permit conditions 7.3.2., 4.3.1. and 3.2.4.)	The pressure transducer must be calibrated minimally on an annual basis and properly maintained (permit condition 7.3.1. and 3.2.4.).
- Monitoring frequency	Measured continuously (permit conditions 3.2.3., 3.2.5., and 3.2.6.)	Measured continuously (permit conditions 3.2.3., 3.2.5., and 3.2.6.).
- Data Collection Procedure	Data point collected at least every 20 seconds (permit condition 3.2.6.)	Data point collected at least every 20 seconds (permit condition 3.2.6.).
- Averaging Period	45 consecutive points averaged for one (1) 15-minute interval. One average number recorded every 15 minutes and four numbers recorded per hour at evenly spaced intervals (permit condition 3.2.6.).	45 consecutive points averaged for one (1) 15-minute interval. One average number recorded every 15 minutes and four numbers recorded per hour at evenly spaced intervals (permit condition 3.2.6.).

(1) Indicator No.1 of 2 in Table H is the same as Indicator No. 1 of 2 in Table B in section I.c.

The regenerative thermal oxidizer (Control Device ID) destroys emissions from the coater lines (C-1 through C-6), as wells as from the lines PC-3 through PC-7. This explains why the combustion chamber temperature (indicator No.1 of 2 in Table H above) is the same for both groups of emission units. Thus, the thermocouple calibration requirement in permit condition 7.3.2. refers to permit

condition 4.3.1. This also explains why the monitoring of RTO temperature for the Coaters C-1 through C-6 (permit condition 4.2.1.) will also fulfill the monitoring required for the coaters PC-3 through PC-7 (7.2.3.). However, the differential pressure indicator is different for the lines PC-3 through PC-7. For these lines, the pressure measuring device is located in the inlet duct of the RTO. For the coaters C-1 through C-6, the pressure measuring device is located in the PTE capture device of the coaters.

5. Relationship of the permittee to Ball Metal Food Container Corp. (Facility ID 009-00027)

The permittee's parent company, Ball Corporation, acquired the U.S. Can facility (Facility ID 009-00015), and renamed the facility the Ball Aerosol and Specialty Container Corporation (the permittee), and has continued using the facility ID 009-00015. For the renewed permit for neighboring Ball Metal Food Container Corp. (Facility ID 009-00027), issued on March 28, 2007, the DAQ determined that the permittee (009-00015) and the Ball Metal Food Container Corp. facility (009-00027) are contiguous and adjacent and are under common control, and as such, the facilities are considered to be one "major source" as defined in 45CSR§30-2.26. During the writing of this renewal permit, the permittee requested that DAQ combine both facilities into one facility ID and company name. This explains why this renewed permit is for Ball Metal Food Container Corporation (instead of Ball Aerosol and Specialty Container), and why this permit's number is R30-00900027-2008 (Part 2 of 2). It may be advisable for the permittee to administratively amend (pursuant to 45CSR§30-6.4.) the Title V permit issued on March 28, 2007 to the Ball Metal Food Container Corp. to indicate that it is Part 1 of 2. Alternatively, if another permit action occurs in part 1 of 2, this change could be written at that time.

6. 45CSR7 – To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations

Current Title V permit R30-00900015-2002, conditions D.1.h. and D.1.i. set forth facility-wide requirements corresponding to 45CSR§§7-5.1. and 5.2., respectively. These requirements have been carried over to the renewal permit as conditions 3.1.13. and 3.1.14., respectively.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- 1. 45CSR2 – To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers.** All manufacturing process combustion sources located at the facility (at the time of this renewal) are not classified as *fuel burning units*, according to the definition in 45CSR§2-2.10. The definition specifically describes a fuel burning unit as a device that produces heat or power by *indirect heat transfer*. None of the sources produce heat or power by indirect heat transfer; therefore, these sources are not subject to 45CSR2.
- 2. 45CSR10 – To Prevent and Control Air Pollution from the Emission of Sulfur Oxides.** None of the combustion sources at the facility emit more than 500 pounds per year of sulfur oxides; therefore, none of the manufacturing process combustion sources are subject to the 2,000 ppmv limit (45CSR§10-4.1.) in accordance with 45CSR§10-4.1.e. Furthermore, all manufacturing process combustion sources located at the facility (at the time of this renewal) are not classified as *fuel burning units*, according to the definition in 45CSR§10-2.8. The definition specifically describes a fuel burning unit as a device that produces heat or power by *indirect heat transfer*. None of the sources produce heat or power by indirect heat transfer; therefore, these sources are not subject to 45CSR10.
- 3. 45CSR21 – Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds.** The facility is not located in Cabell, Kanawha, Putnam, Wayne, or Wood counties and is not subject to this rule according to 45CSR§21-1.1.

4. **45CSR27 – To Prevent and Control the Emissions of Toxic Air Pollutants.** The facility does not emit any of the listed toxic air pollutants in quantities greater than the indicated thresholds (i.e. formaldehyde emissions less than 1,000 pounds).
5. **45CSR29 – Emission Statements for Volatile Organic Compounds.** This facility is located in Brooke County, West Virginia. Since it is not located in Putnam, Kanawha, Cabell, Wayne, Wood, or Greenbrier Counties, 45CSR29 does not apply to this facility according to 45CSR§29-3.3.
6. **40 C.F.R. Part 60 Subpart TT – Standards of Performance for Metal Coil Surface Coating.** This facility cuts the metal coils prior to coating, and as such, Subpart TT is not applicable. However, since the facility is similar to Subpart TT type facilities and has approximately the same capture and destruction rates, there were conditions in R13-2295A that required emission tests to be done in accordance with methods set forth in 40 C.F.R. 60 Subpart TT.
7. **40 C.F.R. Part 63 Subpart T – National Emission Standards for Halogenated Solvent Cleaning.** The permittee does not use any halogenated solvents in a concentration greater than 5 percent by weight as a cleaning and/or drying agent in the parts washers at the facility.
8. **40 C.F.R. Part 63 Subpart SSSS – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil.** According to 40 C.F.R. §63.5090(a), this subpart applies to each facility that is a major source of HAP at which a coil coating line is operated. The facility does not operate a *coil coating line* (which is defined in 40 C.F.R. §63.5110); therefore, 40 C.F.R. Part 63 Subpart SSSS is not applicable to the facility.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date:	April 11, 2008
Ending Date:	May 12, 2008

All written comments should be addressed to the following individual and office:

Denton McDerment
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Denton McDerment
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1221 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

On April 25, 2008, Mr. John Munsch (the environmental contact for Ball Corp.) sent an e-mail to the writer asking if it would be possible to shorten the term of the Part 2 permit so that it expires on the same day as Part 1. The permittee's goal is to combine these parts into one document at the next renewal. On May 7, 2008, the writer sent a reply e-mail to Mr. Munsch stating that DAQ will shorten the term of Part 2, and Ball will combine the applications at renewal of Part 1, and DAQ will issue the renewal as one permit. Mr. Munsch agreed that Parts 1 and 2 will be combined, and the renewal application (that includes both parts) is due on or before September 28, 2011.

No comments were received from U.S. EPA.